Refine Search

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Search Results -

Terms	Documents
L11 AND ((RADIOLOG$ OR TOMOGRAPH$ OR RADIOGRAPH$ OR MRI) WITH (SYSTEM$ OR CONFIGUR$ OR APPARATUS OR EQUIPMENT)).CLM.	5

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L13

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Tuesday, October 17, 2006 Purge Queries | Printable Copy | Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR		
L13	L11 AND ((RADIOLOG$ OR TOMOGRAPH$ OR RADIOGRAPH$ OR MRI) WITH (SYSTEM$ OR CONFIGUR$ OR APPARATUS OR EQUIPMENT)).CLM.	5	L13
L12	L11 AND ((RADIOLOG$ OR TOMOGRAPH$ OR RADIOGRAPH$ OR MRI) WITH (SYSTEM$ OR CONFIGUR$ OR APPARATUS OR EQUIPMENT))	21	L12
L11	L8 OR L9 OR L10	124	L11
	DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR		
	(5701399 | 5883894 | 4189775 | 5513101 | 5255187 | 4845762 | 5953704 | 5833599 | 5878746 | 5740800 | 5550734 | 4315318 | 5758095 | 5471382 | 4860899		

L10	| 4866635 | 5297032 | 4847764 | 5235510 | 5519607 | 4903201 | 5937389 | 5867821 | 4792979 | 5845253 | 5581664 | 5845255 | 5502944 | 5993386 | 5292029 | 5832221 | 4792900 | 5551436 | 5081598 | 4733354 | 5868669 | 4677552 | 4229764 | 5715451 | 4290114 | 5070452 | 5664115 | 5655116 | 5084828 | 6012051 | 5404292 | 4438495 | 5835896 | 3573747 | 5347477 | 5655084 | 5926798 | 5072383 | 4695954 | 5774868 | 5546580 | 4858121 | 4991877 | 5586218 | 4674652 | 5696962 | 5321520 | 4731725 | 5088037 | 5048110 | 5897493 | 5025391 | 5594638 | 4489387 | 5832450 | 5168446 | 4916611 | 5924082 | 5715823 | 5065315 | 5299121 | 4153931 | 5715399 | 5918208 | 5038284 | 5537590 | 5779634 | 5852814 | 5983200 | 4766542 | 5586262 | 5390238 | 5737539 | 5088981 | 4302672 | 5905973 | 5905975 | 5583758 | 5660176 | 4839806 | 5666492 | 6317719 | 5347453 | 5361202 | 5301105 | 5997476 | 5063507 | 5978784 | 5704044 | 4992940 | 5454106 | 5542420 | 5528021 | 5890138 | 5890139 | 5208762 | 5272704 | 5469353 | 5715402)![PN]	114	L10
	DB=USPT,DWPI; THES=ASSIGNEE; PLUR=YES; OP=OR		
L9	("6006191"| "6149585"| "5737539"| "7072840"| "6070149"| "5224177"| "5845255"| "US 5224177A"| "US 6070149A")[ABPN1,NRPN,PN]	12	L9
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR		
L8	L6	9	L8
	DB=USPT,DWPI; THES=ASSIGNEE; PLUR=YES; OP=OR		
L7	("6006191"| "6149585"| "5737539"| "7072840"| "6070149"| "5224177"| "5845255"| "US 5224177A"| "US 6070149A")[URPN]	197	L7
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR		
L6	L1 OR L3 OR L4 OR L5	9	L6
L5	L2 AND 705/?.CCLS.	5	L5
L4	L2 AND 705/$.CCLS.	5	L4
L3	L2 AND 705$.CCLS.	5	L3
L2	RADIOLOG$ SAME RECOMMEND$ AND @AD<=20001012	120	L2
L1	6070149.PN. OR 5224177.PN.	4	L1

END OF SEARCH HISTORY

Hit List

First Hit

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Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 10 of 21 returned.

☐ 1. Document ID: US 7072840 B1

L12: Entry 1 of 21 File: USPT Jul 4, 2006

US-PAT-NO: 7072840
DOCUMENT-IDENTIFIER: US 7072840 B1

TITLE: Prescription management system

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

☐ 2. Document ID: US 6149585 A

L12: Entry 2 of 21 File: USPT Nov 21, 2000

US-PAT-NO: 6149585
DOCUMENT-IDENTIFIER: US 6149585 A

TITLE: Diagnostic enhancement method and apparatus

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

☐ 3. Document ID: US 6006191 A

L12: Entry 3 of 21 File: USPT Dec 21, 1999

US-PAT-NO: 6006191
DOCUMENT-IDENTIFIER: US 6006191 A

TITLE: Remote access medical image exchange system and methods of operation therefor

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

☐ 4. Document ID: US 5953704 A

L12: Entry 4 of 21 File: USPT Sep 14, 1999

US-PAT-NO: 5953704
DOCUMENT-IDENTIFIER: US 5953704 A

TITLE: Health care management system for comparing user-proposed and recommended resources required for treatment

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

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☐ 5. Document ID: US 5878746 A

L12: Entry 5 of 21 File: USPT Mar 9, 1999

US-PAT-NO: 5878746
DOCUMENT-IDENTIFIER: US 5878746 A
** See image for Certificate of Correction **

TITLE: Computerized medical diagnostic system

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

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☐ 6. Document ID: US 5845255 A

L12: Entry 6 of 21 File: USPT Dec 1, 1998

US-PAT-NO: 5845255
DOCUMENT-IDENTIFIER: US 5845255 A

TITLE: Prescription management system

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

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☐ 7. Document ID: US 5779634 A

L12: Entry 7 of 21 File: USPT Jul 14, 1998

US-PAT-NO: 5779634
DOCUMENT-IDENTIFIER: US 5779634 A

TITLE: Medical information processing system for supporting diagnosis

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

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☐ 8. Document ID: US 5737539 A

L12: Entry 8 of 21 File: USPT Apr 7, 1998

US-PAT-NO: 5737539
DOCUMENT-IDENTIFIER: US 5737539 A

TITLE: Prescription creation system

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 9. Document ID: US 5655084 A

L12: Entry 9 of 21 File: USPT Aug 5, 1997

US-PAT-NO: 5655084
DOCUMENT-IDENTIFIER: US 5655084 A

TITLE: Radiological image interpretation apparatus and method

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 10. Document ID: US 5586262 A

L12: Entry 10 of 21 File: USPT Dec 17, 1996

US-PAT-NO: 5586262
DOCUMENT-IDENTIFIER: US 5586262 A

TITLE: Image data management system particularly for use in a hospital

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents
L11 AND ((RADIOLOG$ OR TOMOGRAPH$ OR RADIOGRAPH$ OR MRI) WITH (SYSTEM$ OR CONFIGUR$ OR APPARATUS OR EQUIPMENT))	21

Display Format: - Change Format

Previous Page Next Page Go to Doc#

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Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 11 through 20 of 21 returned.

☐ 11. Document ID: US 5513101 A

L12: Entry 11 of 21 File: USPT Apr 30, 1996

US-PAT-NO: 5513101
DOCUMENT-IDENTIFIER: US 5513101 A

TITLE: Radiological image interpretation apparatus and method

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 12. Document ID: US 5469353 A

L12: Entry 12 of 21 File: USPT Nov 21, 1995

US-PAT-NO: 5469353
DOCUMENT-IDENTIFIER: US 5469353 A

TITLE: Radiological image interpretation apparatus and method

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 13. Document ID: US 5321520 A

L12: Entry 13 of 21 File: USPT Jun 14, 1994

US-PAT-NO: 5321520
DOCUMENT-IDENTIFIER: US 5321520 A
** See image for Certificate of Correction **

TITLE: Automated high definition/resolution image storage, retrieval and transmission system

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 14. Document ID: US 5235510 A

L12: Entry 14 of 21 File: USPT Aug 10, 1993

US-PAT-NO: 5235510
DOCUMENT-IDENTIFIER: US 5235510 A

TITLE: Computer-aided diagnosis system for medical use

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Drawing De

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☐ 15. Document ID: US 5224177 A

L12: Entry 15 of 21 File: USPT Jun 29, 1993

US-PAT-NO: 5224177
DOCUMENT-IDENTIFIER: US 5224177 A
**** See image for Certificate of Correction ****

TITLE: High quality film image correction and duplication method and system

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Drawing De

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☐ 16. Document ID: US 4792900 A

L12: Entry 16 of 21 File: USPT Dec 20, 1988

US-PAT-NO: 4792900
DOCUMENT-IDENTIFIER: US 4792900 A

TITLE: Adaptive filter for dual energy radiographic imaging

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Drawing De

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☐ 17. Document ID: US 4438495 A

L12: Entry 17 of 21 File: USPT Mar 20, 1984

US-PAT-NO: 4438495
DOCUMENT-IDENTIFIER: US 4438495 A

TITLE: Tomography window-level gamma functions

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Drawing De

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☐ 18. Document ID: US 4315318 A

L12: Entry 18 of 21 File: USPT Feb 9, 1982

US-PAT-NO: 4315318
DOCUMENT-IDENTIFIER: US 4315318 A

TITLE: Method and apparatus for processing a radiation image

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

☐ 19. Document ID: US 4302672 A

L12: Entry 19 of 21 File: USPT Nov 24, 1981

US-PAT-NO: 4302672
DOCUMENT-IDENTIFIER: US 4302672 A

TITLE: Image gradation processing method and apparatus for radiation image recording system

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

☐ 20. Document ID: US 4189775 A

L12: Entry 20 of 21 File: USPT Feb 19, 1980

US-PAT-NO: 4189775
DOCUMENT-IDENTIFIER: US 4189775 A
** See image for Certificate of Correction **

TITLE: Method and apparatus for subsection analysis using computed tomography

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents
L11 AND ((RADIOLOG$ OR TOMOGRAPH$ OR RADIOGRAPH$ OR MRI) WITH (SYSTEM$ OR CONFIGUR$ OR APPARATUS OR EQUIPMENT))	21

Display Format: - Change Format

Previous Page Next Page Go to Doc#

Hit List

First Hit

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Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 21 through 21 of 21 returned.

☐ 21. Document ID: JP 2004048655 A, US 5224177 A, JP 05304605 A

L12: Entry 21 of 21 File: DWPI Feb 12, 2004

DERWENT-ACC-NO: 1993-219866
DERWENT-WEEK: 200413

TITLE: High quality film image correction and duplication method - enhancing conventional radiographs using digital processing and using digitiser as front end picture archiving and communication system

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents
L11 AND ((RADIOLOG$ OR TOMOGRAPH$ OR RADIOGRAPH$ OR MRI) WITH (SYSTEM$ OR CONFIGUR$ OR APPARATUS OR EQUIPMENT))	21

Display Format: - Change Format

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Generate Collection Print

L13: Entry 1 of 5 File: USPT Jul 14, 1998

US-PAT-NO: 5779634
DOCUMENT-IDENTIFIER: US 5779634 A

TITLE: Medical information processing system for supporting diagnosis

DATE-ISSUED: July 14, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ema; Takehiro	Otawara			JP
Nishihara; Eitaro	Otawara			JP

US-CL-CURRENT: 600/407; 128/920

ABSTRACT:

A medical information processing system for supporting diagnostic interpretation, featuring a data storage unit for storing an interpretation image and interpretation reference images for which a doctor will refer to interpret the interpretation image. A data loading unit loads the interpretation reference images from the data storage unit into a workstation unit according to a predetermined priority order. The data loading unit loads the images into a workstation which is selected from the workstation unit according to workstation vs. interpretation examination modality information. A diagnostic information creation unit creates diagnostic information relative to the image by inputting the doctor's findings or computerizing with a computer unit. Positions of abnormalities and degrees of the abnormalities are determined, and positions in association with the images are calculated. A diagnostic information comparing unit compares the diagnostic information with each other and creates differences between the diagnostic information as time-sequential abnormality change data. A diagnostic information output unit outputs the diagnostic information or results of comparing the diagnostic information with each other and superimposes the contents of the time-sequential abnormality change data on the associated image. The diagnostic information output unit also outputs predetermined contents for an inconsistency of the diagnostic information for the doctor's findings with the diagnostic information for the results of computerizing and includes a plurality of displays and automatically determines relational positions in which the images are displayed on the displays according to a predetermined relational information.

55 Claims, 27 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 22

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L13: Entry 1 of 5 File: USPT Jul 14, 1998

DOCUMENT-IDENTIFIER: US 5779634 A
TITLE: Medical information processing system for supporting diagnosis

CLAIMS:

36. A medical information processing system according to claim 30, wherein said modality includes at least one of an ultrasonic diagnostic apparatus, X-ray diagnostic apparatus, X-ray computed tomography system and magnetic resonance imaging system.

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Generate Collection Print

L13: Entry 2 of 5 File: USPT Aug 5, 1997

A

US-PAT-NO: 5655084
DOCUMENT-IDENTIFIER: US 5655084 A

TITLE: Radiological image interpretation apparatus and method

DATE-ISSUED: August 5, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pinsky; Howard	Mansfield	MA		
Sheldon; Scott S.	Boston	MA		
Christakis; Nicholas A.	Philadelphia	PA		
Schmertzler; Michael	New Caanan	CT		

US-CL-CURRENT: 705/3

ABSTRACT:

A Radiology Healthcare Network provides high quality, timely medical interpretations of radiological images on a national (e.g., across the U.S.) and regional basis. The images can include images created by conventional x-ray technology, computed radiography, magnetic resonance imaging (MRI), computed tomography (CT), ultrasound imaging, nuclear medicine, and mammography equipment. The invention includes the acquisition of these images from health care facilities, the conversion of these images to digital format, the routing of these converted images, the interpretation of these routed images, and the routing of the interpretations back to the originating facility. The images are routed (e.g., on a variety of high-speed digital and analog telecommunication networks) to the appropriate interpretation resource by an administrative site on the Network based on one or more requirements associated with the radiological study. The interpretation can be performed on high-resolution workstations and/or on films produced by film printers. The invention can include quality control measures which assure high image and interpretation quality. The control and tracking of images by the administrative site results in the production of a complete, signed interpretive report in a timely manner.

27 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

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Generate Collection Print

L13: Entry 2 of 5 File: USPT Aug 5, 1997

DOCUMENT-IDENTIFIER: US 5655084 A
TITLE: Radiological image interpretation apparatus and method

CLAIMS:

18. The system of claim 17, wherein the medical images comprise images selected from the group comprising: radiological images, computer tomography images, ultrasound images, and magnetic resonance images.

27. The system of claim 25 wherein the acquisition equipment is selected from the group comprising: an x-ray apparatus, a computerized axial tomography apparatus, a nuclear magnetic resonance apparatus, or an ultrasonic apparatus.

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Generate Collection Print

L13: Entry 3 of 5 File: USPT Apr 30, 1996

US-PAT-NO: 5513101
DOCUMENT-IDENTIFIER: US 5513101 A

TITLE: Radiological image interpretation apparatus and method

DATE-ISSUED: April 30, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pinsky; Howard	Mansfield	MA		
Sheldon; Scott S.	Boston	MA		
Christakis; Nicholas A.	Philadelphia	PA		
Schmertzler; Michael	New Caanan	CT		

US-CL-CURRENT: 705/3; 706/924

ABSTRACT:

A Radiology Healthcare Network provides high quality, timely medical interpretations of radiological images on a national (e.g., across the U.S.) and regional basis. The images can include images created by conventional x-ray technology, computed radiography, magnetic resonance imaging (MRI), computed tomography (CT), ultrasound imaging, nuclear medicine, and mammography equipment. The invention includes the acquisition of these images from health care facilities, the conversion of these images to digital format, the routing of these converted images, the interpretation of these routed images, and the routing of the interpretations back to the originating facility. The images are routed-(e.g., on a variety of high-speed digital and analog telecommunication networks) to the appropriate interpretation resource by an administrative site on the Network based on one or more requirements associated with the radiological study. The interpretation can be performed on high-resolution workstations and/or on films produced by film printers. The invention can include quality control measures which assure high image and interpretation quality. The control and tracking of images by the administrative site results in the production of a complete, signed interpretive report in a timely manner.

22 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

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L13: Entry 3 of 5 File: USPT Apr 30, 1996

DOCUMENT-IDENTIFIER: US 5513101 A
TITLE: Radiological image interpretation apparatus and method

CLAIMS:

1. A method for interpreting radiological images, comprising:

a) generating a radiological image at an image acquiring site;

b) creating a radiology study which includes the image and identifying information about the study;

c) digitally transmitting the identifying information about the study over a wide area network to a digital processing system at an administrative site for determination of radiological study parameters from the identifying information, and selection of an interpretation site based on the study parameters and information stored at the administrative site relating to each of a plurality of interpretation sites;

d) digitally transmitting the study over a wide area network to an interpretation site in response to a command signal from the administrative site; and

e) receiving an interpretation of the study at a site determined by the administrative site.

11. A method for interpreting radiological images comprising:

a) providing a digital processing system for use at an acquiring site for: (i) generating a study containing one or more radiological images, (ii) generating identifying information about the study, and (iii) transmitting the study and the identifying information over a wide area network;

b) providing a digital processing system for use at an administrative site for: (i) receiving the study and identifying information over the wide area network, (ii) storing information relating to a plurality of image interpretation sites which are coupled to the wide area network, (iii) performing a comparison between the identifying information and the information relating to the image interpretation sites, (iv) using the comparison to select an image interpretation site, and (v) controlling the routing of the study to the interpretation site over the wide area network; and

c) providing a digital processing system at an image interpretation site for: (i) receiving a study over the wide area network, (ii) displaying the study on a high-resolution image viewing system, (iii) generating a report relating to the study and (iv) transmitting the report over the wide area network to a site determined by the administrative site.

20. A method for providing interpretation of radiological images, comprising: using a wide area network to communicate between: (i) a data processing system located at an administrative site, (ii) digital transmission equipment located at a plurality

of image acquiring sites for transmitting onto the wide area network digital radiological images and identifying information relating to a study performed at the acquiring site, and (iii) digital receiving equipment located at a plurality of image interpretation sites for receiving the digital radiological images and identifying information; wherein the data processing system at the administrative site receives identifying information about a study from one of the acquiring sites, determines study parameters from the identifying information, compares the study parameters with information stored at the administrative site relating to the plurality of image interpretation sites, selects an interpretation site for interpretation of the study, and controls the routing of the study from the acquiring site to the interpretation site for interpretation of the study; and wherein the interpretation site generates a report about the study and transmits the report over the wide area network to the acquiring site that generated the study.

21. A system for providing interpretation of radiological images, comprising:

at least one image-acquiring site comprising: (i) acquisition equipment for obtaining images, (ii) a host computer for creating a study comprising patient information and the images, (iii) networking equipment for routing the study over a wide area network;

an administrative site coupled to at least one image acquiring site by a wide area network, comprising: (i) a data processing system for: receiving the study, selecting an interpretation site based on a determination of radiological parameters from the patient information, initiating transmission of the study to the selected interpretation site, and monitoring the progress of an interpretation at the interpretation site, and (ii) networking equipment for transmitting the study to a selected interpretation site; and

at least one interpretation site coupled to the administrative site by a wide area network, comprising: (i) a high-resolution image viewing workstation for viewing the study, (ii) a computer for generating an interpretation of the study, and (iii) networking equipment for routing the interpretation under the control of the administrative site.

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First Hit Fwd Refs Previous Doc Next Doc Go to Doc#
End of Result Set

Generate Collection Print

L13: Entry 5 of 5 File: USPT Feb 19, 1980

US-PAT-NO: 4189775
DOCUMENT-IDENTIFIER: US 4189775 A
**** See image for Certificate of Correction ****

TITLE: Method and apparatus for subsection analysis using computed tomography

DATE-ISSUED: February 19, 1980

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Inouye; Tamon	Tokyo			JP
Mizutani; Hiroyuki	Kawasaki			JP
Uehara; Toshio	Tokyo			JP

US-CL-CURRENT: 378/11; 348/625, 378/901, 382/131

ABSTRACT:

An apparatus and method for tomographic analysis comprising a detecting system for detecting a number of radiation beams having penetrated a sectional area of a subject and producing projection data signals; a CPU and a memory for applying a filter function to the projection data signals by a convolution integration or by a computational technique included in a filtered-back projection, thereby calculating modified projection data signals, and conducting back projection operations only with respect to points in a partial region or subsection of the sectional portion area by means of the modified projection data, thereby calculating the radiation beam absorption coefficients at said points, the integral operation used in the calculation of the modified projection data signals being limited to an interval in which the quality of an image of said partial region or subsection to be displayed can exclusively be improved by the filter function; and a display unit for displaying the image of the partial region on the basis of said absorption coefficients.

6 Claims, 9 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

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L13: Entry 5 of 5 File: USPT Feb 19, 1980

DOCUMENT-IDENTIFIER: US 4189775 A
**** See image for Certificate of Correction ****
TITLE: Method and apparatus for subsection analysis using computed tomography

CLAIMS:

1. In a system for image reconstruction by computed tomography wherein projection data signals are generated by detecting radiation beams projected through an internal area to be examined, said beams being projected in the plane of said area and at a plurality of scan angles relative thereto, said projection data signals representing the detected intensity of said beams, a method comprising the steps of:

(a) storing said projection data signals;

(b) storing a set of data values representing a filtering function;

(c) reading from storage selected projection data signals generated by beams projected at a predetermined scan angle, said projection data signals being selected for readout under control of a designating signal defining a subsection area within said internal area to be examined such that only the projection data signals produced by beams passing through said subsection area and produced by beams passing through the regions immediately adjacent to and on either side of said subsection area are read out, said subsection area and said adjacent regions encompassing an area smaller than said internal area;

(d) processing said signals read out from storage with said filtering function data values to produce a set of modified projection data signals;

(e) storing said modified projection data signals;

(f) repeating steps (c), (d) and (e) to generate and store additional modified projection data signals for beams projected at a plurality of different scan angles; and

(b) accumulating in a memory pixel values representing the absorption coefficients for a plurality of points within said subsection area by reading from storage and back-projecting only those modified projection data signals corresponding to beams passing through said subsection area.

6. In a system for image reconstruction by computed tomography wherein projection data signala are generated by detecting radiation beams projected through an internal area to be examined, said beams being projected in the plane of said area and at a plurality of scan angles relative thereto, said projection data signals representing the detected intensity of said beams, the combination comprising:

means for storing said projection data signals;

means for storing a set of data values representing a filtering function;

means sequentially operating to process said stored filtering function data values with a set of selected projection data signals stored for each of said plural scan angles, whereby a set of modified projection data signals is generated for each of said scan angles;

said processing means including means for selecting for processing only those projection data signals in each scan angle set generated by beams passing through a predetermined subsection area within said internal area to be examined and by means passing through the regions immediately adjacent to and on either side of said subsection area, said subsection area and said adjacent regions encompassing an area smaller than said internal area;

means for storing said modified projection data signals; and

means for converting said stored modified projection data signals into absorption coefficient values for a plurality of points within said subsection area by reading said modified projection data signals from storage and back-projecting only those signals corresponding to beams passing through said subsection area, whereby data is accumulated for reconstructing an image of said subsection area.

Previous Doc Next Doc Go to Doc#

Refine Search

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Search Results -

Terms	Documents
L11 AND ((RADIOLOG$ OR TOMOGRAPH$ OR RADIOGRAPH$ OR MRI) WITH (SYSTEM$ OR CONFIGUR$ OR APPARATUS OR EQUIPMENT))	21

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US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L12

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Tuesday, October 17, 2006 Purge Queries Printable Copy
Create Case

Set Name side by side	Query	Hit Count	Set Name result set

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR

L12	L11 AND ((RADIOLOG$ OR TOMOGRAPH$ OR RADIOGRAPH$ OR MRI) WITH (SYSTEM$ OR CONFIGUR$ OR APPARATUS OR EQUIPMENT))	21	L12
L11	L8 OR L9 OR L10	124	L11

DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR

L10	(5701399 | 5883894 | 4189775 | 5513101 | 5255187 | 4845762 | 5953704 | 5833599 | 5878746 | 5740800 | 5550734 | 4315318 | 5758095 | 5471382 | 4860899 | 4866635 | 5297032 | 4847764 | 5235510 | 5519607 | 4903201 | 5937389 | 5867821 | 4792979 | 5845253 | 5581664 | 5845255 | 5502944 | 5993386 | 5292029 | 5832221 | 4792900 | 5551436 | 5081598 | 4733354 | 5868669 | 4677552 | 4229764 | 5715451 | 4290114 | 5070452 | 5664115 | 5655116 | 5084828 | 6012051 | 5404292 | 4438495 | 5835896 | 3573747 | 5347477 | 5655084 | 5926798 | 5072383 | 4695954 | 5774868 | 5546580 | 4858121 | 4991877 | 5586218 | 4674652 | 5696962 | 5321520 | 4731725 | 5088037 | 5048110 | 5897493 | 5025391 | 5594638 | 4489387 | 5832450 | 5168446 | 4916611 | 5924082 | 5715823 | 5065315 | 5299121 | 4153931 | 5715399 | 5918208 | 5038284 | 5537590 | 5779634 | 5852814 | 5983200 | 4766542 | 5586262 | 5390238 | 5737539 | 5088981 | 4302672 | 5905973 | 5905975 | 5583758 | 5660176 | 4839806 | 5666492 | 6317719 | 5347453 | 5361202 | 5301105 | 5997476 | 5063507 | 5978784 | 5704044 | 4992940 | 5454106 | 5542420 | 5528021 | 5890138 | 5890139 | 5208762 | 5272704 | 5469353 | 5715402)![PN]	114	L10

DB=USPT,DWPI; THES=ASSIGNEE; PLUR=YES; OP=OR

L9	("6006191"| "6149585"| "5737539"| "7072840"| "6070149"| "5224177"| "5845255"| "US 5224177A"| "US 6070149A")[ABPN1,NRPN,PN]	12	L9

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR

L8	L6	9	L8
	DB=USPT,DWPI; THES=ASSIGNEE; PLUR=YES; OP=OR		
L7	("6006191"| "6149585"| "5737539"| "7072840"| "6070149"| "5224177"| "5845255"| "US 5224177A"| "US 6070149A")[URPN]	197	L7
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR		
L6	L1 OR L3 OR L4 OR L5	9	L6
L5	L2 AND 705/?.CCLS.	5	L5
L4	L2 AND 705/$.CCLS.	5	L4
L3	L2 AND 705$.CCLS.	5	L3
L2	RADIOLOG$ SAME RECOMMEND$ AND @AD<=20001012	120	L2
L1	6070149.PN. OR 5224177.PN.	4	L1

END OF SEARCH HISTORY